

WHAT IS CLAIMED IS:

1. A wireless communication system comprising:
a filter; and
a semiconductor chip including a signal processing integrated circuit having an amplifier for receiving an output signal from said filter,
wherein a main surface of said semiconductor chip is provided with a plurality of electrode terminals along an edge portion thereof;
wherein said amplifier has a transistor including a control electrode to which the output signal of said filter is to be supplied, a first electrode through which a signal is outputted in accordance with the signal supplied to said control electrode, and a second electrode to which a voltage is applied;
wherein said control electrode, said first electrode and said second electrode of said transistor are connected to said electrode terminals through wirings, respectively;
and wherein none of wirings are arranged between said electrode terminals and placements of said control electrode, said first electrode and said second electrode such that wirings traverse other wirings.
2. A wireless communication system according to claim 1, wherein said semiconductor chip has said edge portion and an opposite side to said edge portion, and said electrode terminals, said transistor and a wiring through which a voltage is supplied to said transistor

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are in turn arranged from said edge portion towards said opposite side.

3. A wireless communication system according to claim 1, wherein the voltage applied to said second electrode terminal of said transistor is a ground voltage, and the electrode terminal through which the ground voltage is supplied to said second electrode terminal of said transistor is different from the electrode terminal through which the ground voltage is supplied to electrostatic discharge protecting circuits provided for said transistor.

4. A wireless communication system according to claim 1, wherein said signal processing integrated circuit includes a signal transmitting circuit and the wiring through which a voltage is supplied to said signal transmitting circuit is coupled to the same electrode terminal as that of the wiring through which a voltage is supplied to a bias circuit and said electrostatic discharge protecting circuits for said amplifier.

5. A wireless communication system according to claim 2, wherein said amplifier is present on said edge portion of said semiconductor chip and is arranged near the center of said edge portion.

6. A wireless communication system according to claim 2, wherein said amplifier is arranged at a corner part which is defined between said edge portion of said semiconductor chip and a crossing side which crosses

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said one edge portion.

7. A wireless communication system according to claim 2, wherein no wiring is arranged between said electrode terminal and said edge portion of said semiconductor chip.

8. A wireless communication system according to claim 1, wherein the wiring arranged from said electrode terminal is linked with said control electrode of said transistor and one electrode of protection diodes which are provided for said transistor.

9. A wireless communication system according to claim 3, wherein said amplifier is arranged between said edge portion of said semiconductor chip and said electrostatic discharge protecting circuit.

10. A wireless communication system comprising two signal processing circuit having different wavelengths, each of said signal processing circuits including:

a filter; and

a signal processing integrated circuit having an amplifier receiving an output signal from said filter,

wherein said two signal processing integrated circuits are formed on a semiconductor chip;

wherein a main surface of said semiconductor chip is provided with a plurality of electrode terminals along an edge portion thereof;

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wherein each of said signal processing integrated circuits has a transistor including a control electrode to which the output signal of said filter to be supplied, a first electrode through which a signal is outputted in accordance with the signal supplied to said control electrode, and a second electrode to which a voltage is applied;

wherein said control electrode, said first electrode and said second electrode of each of said transistors are electrically connected to said electrode terminals through wirings, respectively; and

wherein none of wirings are arranged between said electrode terminals and placements of said control electrode, said first electrode and said second electrode such that wirings traverse other wirings.

11. A wireless communication system according to claim 10, wherein said semiconductor chip has said edge portion and an opposite side opposite to said edge portion, and said electrode terminals, said transistors and a wiring through which a voltage is supplied to said transistor are in turn arranged from said edge portion towards said opposite side.

12. A wireless communication system according to claim 10, wherein the voltage applied to said second electrode terminal of said transistor is a ground voltage, and the electrode terminal through which the ground voltage is supplied to said second electrode terminal of said transistor is different from the

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electrode terminal through which the ground voltage is supplied to electrostatic discharge protecting circuits which are provided for said transistor.

13. A wireless communication system according to claim 10, wherein said each amplifier of said signal processing systems and said electrostatic discharge protecting circuits connected to said amplifier are provided in one area;

said one area has a contour which is surrounded with a side extending along said edge portion of said semiconductor chip, an opposite side opposite to said edge portion and sides linking said edge portion with said opposite side; and

said opposite side is of a power source line and a ground line of a contour which is changed step by step.

14. A wireless communication system according to claim 10, wherein said amplifier is a low-noise amplifier.

15. A wireless communication system according to claim 10, wherein said amplifier of each of said signal processing systems and said electrostatic discharge protecting circuits connected to said amplifier are provided in one area;

said one area is provided at a predetermined interval between said edge portion of said semiconductor chip and an opposite side opposite to said edge portion; and

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said opposite side is of a power source line and a ground line of a contour which is changed step by step.

16. A wireless communication system according to claim 10, wherein said signal processing integrated circuit has a signal transmitting circuit and a wiring through which a voltage is applied to said signal transmitting circuit is coupled to the same electrode terminal as that of the wiring through which a voltage is applied to a bias circuit and electrostatic discharge protecting circuits for said amplifier.

17. A wireless communication system according to claim 11, wherein said amplifier is present on the side of said edge portion of said semiconductor chip and is arranged near the center of said edge portion.

18. A wireless communication system according to claim 11, wherein said amplifier is arranged in a corner part which is defined between said edge portion of said semiconductor chip and a crossing side which crosses said edge portion.

19. A wireless communication system according to claim 11, wherein no wiring is arranged between said electrode terminal and said edge portion of said semiconductor chip.

20. A wireless communication system according to claim 10, wherein the wiring arranged from said electrode terminal is linked with said control electrode of said transistor and one electrode of

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electrostatic discharge protecting which are provided for said transistor.

21. A wireless communication system according to claim 20, wherein electrostatic discharge protecting circuit provided for said transistor are connected to said first electrode and said second electrode of said transistor, respectively.

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